City of Regina
Impact of New Retail Developments

October, 2002

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Government Revenues flowing from a Generic Retail Development

City of Regina

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A report prepared for the:

City of Regina

by

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SECTION 1 BACKGROUND AND APPROACH

In the 1980s, retail trade in the City of Regina was concentrated in two clusters – large suburban malls, and downtown department stores and small specialty shops. In more recent years, there has been an unprecedented reallocation of retail space to the East side of the City along highway #1 and in the Northwest along Pasqua Street and Rochdale Boulevard. The new developments are not the traditional suburban malls. They tend to be large stores sometimes referred to as "big box" retailers.

This trend prompted the City of Regina to examine the impact that this kind of retail development had and would continue to have on municipal, provincial, and federal government revenues.

The research was conducted by Doug Elliott, the principal of QED Information Systems Inc., a Regina-based consulting firm, and the publisher of *Sask Trends Monitor*. Opinions expressed here do not represent those of the city administration or city council.

The Approach

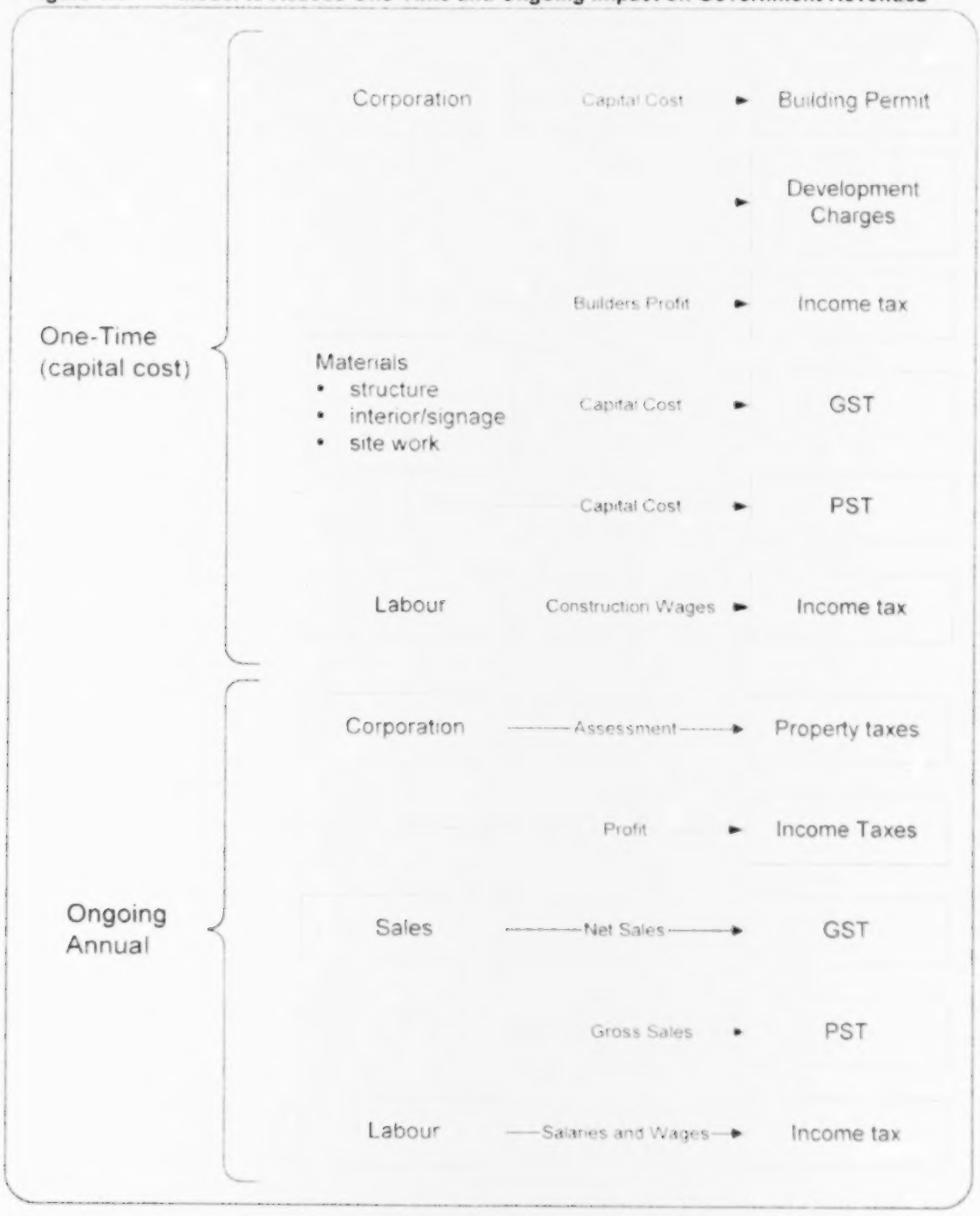
Data to measure the actual economic impact of these new developments is non-existent and it is virtually impossible to measure the long term impact because of extraneous factors and spin off effects on other retailers and other non-retail businesses. This research takes a much narrower approach, measuring only the direct effect on government revenues and only for a single development. Indirect effects – incremental business and consumer spending as a result of any increase in profit or income – are excluded.

We have also not tried to calculate the costs that may offset any increase in government revenues. In the case of the City of Regina, these can be significant. In fact, the development charges levied by the City, one of the direct effects, are specifically designed to offset the cost of providing services to new developments. These and other limitations of the approach are discussed in qualitative terms in Section 4.

The direct effects are classified into two categories – one-time effects that arise from the construction and development of the site, and ongoing effects from the operation of the new development. One-time effects are described in Section 2; ongoing effects are described in Section 3. Figure 1.1 shows how the one-time and ongoing effects lead to different kinds of government revenues. These revenues (primarily taxes) are either paid by the corporation(s) involved in the development, the employees working there, or the store's customers.

In the analysis that follows, we are assuming that the development is a large (125,000 square feet or 11,600 square metres) store that can be classified as selling general merchandise and is typical in the sense that sales and employment follow the provincial or national averages for this kind of store. This kind of store was chosen to avoid the difficulty in calculating GST and PST arising from a store that sells a mix of groceries and non-food items.

Figure 1.1 Model to Assess One-Time and Ongoing Impact on Government Revenues



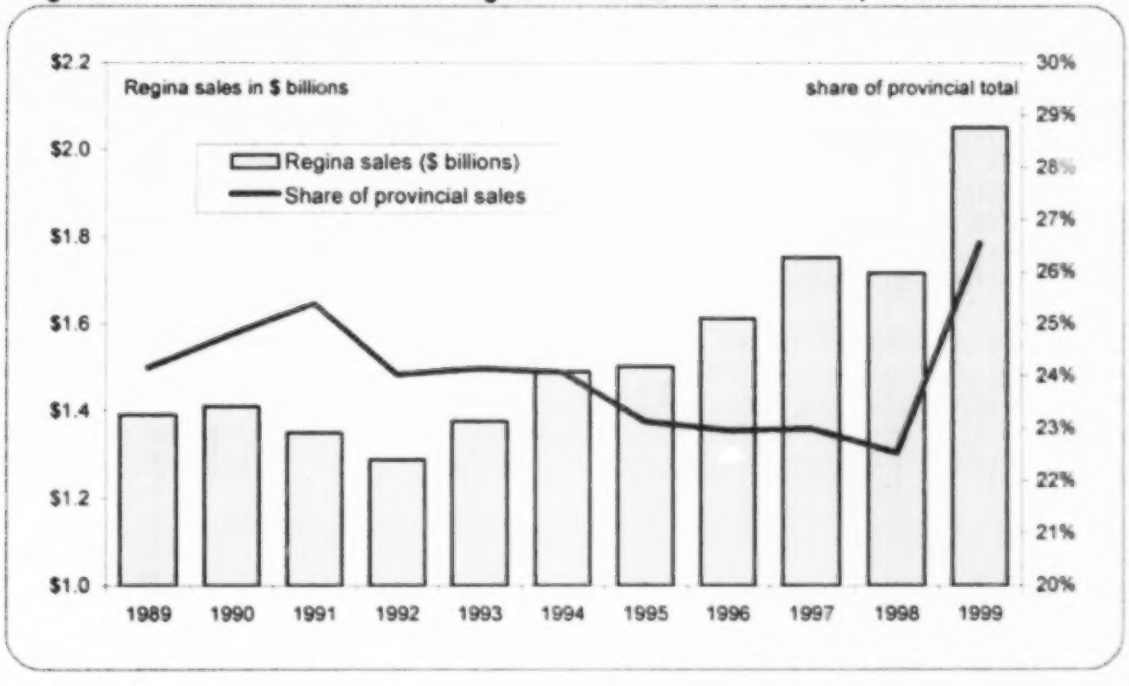
Context

Data describing retail trade in Regina stores is available from Statistics Canada although the information is somewhat dated and unduly influenced by sales from new motor vehicle dealers[1]. Figure 1.2 shows that after languishing near $1.5 billion in the late 1980s and early 1990s, sales in Regina's retail stores increased sharply in 1996 and 1997 and again in 1999 totalling more than $2 billion.

Commercial building permits issued by the City of Regina will include the permits for retail stores. Figure 1.3 shows that the value of these permits has been fluctuating over the past decade[2]. The marked increase from $27 million in 1994 to $61 million in 2001 is at least partly a consequence of recent developments in the retail trade sector.

Employment figures for the combined retail and wholesale trade sector for employees living in the Regina CMA are available from Statistics Canada's monthly labour force survey. Figure 1.4 shows volatility from year to year but a general upward trend since the mid 1990s. There were, however, the same number of retail/wholesale trade employees in 2001 as in 1987, an indication of the concentration of sales in larger establishments.

Figure 1.2 Gross Retail Sales in Regina CMA Retail Establishments, 1989 to 1999



1 *Source: City of Regina Demographic and Economic Trends, August 2002*

2 *Source: Statistics Canada CANSIM Table 026-0003*

Figure 1.3 Commercial Sector Building Permits, City of Regina, 1980 to 2002

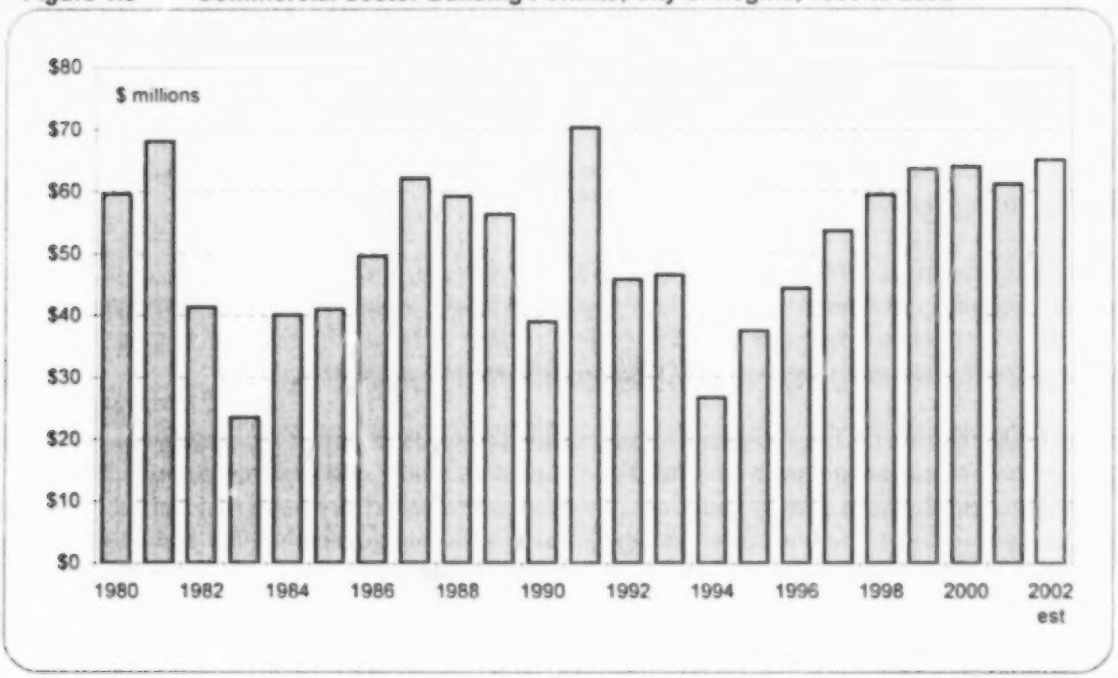


Figure 1.4 Employment in the Retail/Wholesale Trade Sector, Regina CMA

SECTION 2 ONE-TIME IMPACTS

This section estimates revenues to the three levels of government that arise from the original construction of the generic general merchandise store.

The size and cost of a retail development can vary substantially as Table 2.1 shows. The capital cost of the developments, as measured by the value of the building permits issued for a sample of recent retail stores, varies from $2.9 million to $7.5 million. On a square footage basis, this works out to a range of $30 to $80 per square foot.

Table 2.1 Size and Capital Cost for Selected Retail Developments

Development	building permit value ($ millions)	size in ft² (000)
Walmart East	$3.90	128
Walmart North	$6.04	128
IGA North	$3.01	43
IGA East	$2.90	37
Superstore East	$7.48	142
Superstore North	$7.43	142
Sample development	**$6.25**	**125**

Source: City of Regina Building Permits

In the balance of this report, the "generic" development chosen is a 125,000 square foot building with a capital cost of $50/square foot including sitework. This sample building would cost, therefore, $6.25 million to construct.
A breakdown of the capital cost for these kinds of buildings was obtained from a local construction firm that has been involved in several large retail developments. This information, summarized in Table 2.2, is used to estimate some of the one-time impacts of the generic development on government revenues.

A breakdown of the capital cost into labour and materials was not available but the industry "norm" of a 50:50 split was modified slightly to a 40% labour:60% materials ratio. This is based on the fact that these kinds of developments tend to be "turn-key" projects with the bulk of the capital costs for materials rather than labour.

That means that out of the $6.25 million project cost, $2.50 million would be paid to construction workers, project managers, and ancillary labour. The remaining $3.75 million would be for materials.

Table 2.2 Breakdown of Capital Cost for Sample Retail Development

Development	cost ($ thousands)	percent of total
Structural	$1,400	22%
Mechanical/electrical	$1,450	23%
Interior, finish, and furnishings	$1,550	25%
Other	$550	9%
Site work	$1,300	21%
Total	**$6,250**	**100%**

Government Revenues

Table 2.3 shows the aggregate revenue statement for Canadian construction firms[3] over the three year period ending in 2000, the most recent year available.

These data suggest that corporate income taxes would account for 1.0% of gross sales in a typical project. Corporate income taxes were split on a 2/3:1/3 basis between the federal and provincial governments[4]. The figures in Table 2.3 also confirm the fact that wage and salary costs are lower than the traditional 50:50 ratio often used.

Based on actual building permits paid for similar developments, the building permit fee for the generic store would be approximately 0.5% of the capital cost or $31,000.

Development charges are based on the size of the development and the value of the land. For the generic store, we assumed a parcel of seven hectares at a value of $100,000 per hectare. The 2003 development charge is $69,278 per hectare, yielding a development charge of $485,000. To this, a cash dedication of $59,000 in lieu of parks was added to bring the total development charges to $544,000.

Table 2.3 Aggregate Revenue Statement for Construction Firms, Canada, 1998-2000 Average

	$ millions	% of sales
Gross sales	$105,508	100%
Other revenues	$2,729	
Gross income	$108,237	
Cost of goods sold	$76,840	73%
Wages and salaries	$23,729	22%
Indirect taxes*	$1,007	1%
Depreciation	$2,780	3%
Other expenses	$779	1%
Total expenses	$104,799	
Net income before taxes	$3,297	
Income taxes	$1,051	1.0%
Net income after taxes	$2,046	

* GST, PST, Property taxes, gasoline tax, etc.

The calculation of income taxes paid by the construction workers is more problematic. The average hourly rate for an employee in a large (100 or more employees) Saskatchewan construction firm was $19.30 in 2002[5]. The tax rate on this income varies by the number of deductions available to the worker and how many hours are worked.

The maximum tax rate would occur if the employee worked full-time at that rate for the entire year and had no deductions beyond the normal ones. The combined federal/provincial tax rate in this case would be 22%. Overtime payments would make the marginal tax rate even higher. On the other hand, with only six months employment at that rate and two dependants, the tax rate on this kind of salary could be as low as 9%.

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3 Source: CANSIM Table 180-0003; NAICS classification 23

4 This is the ratio of corporate taxes paid by all Saskatchewan businesses in 1999.

5 Source: Statistics Canada Labour Force Survey microdata

Table 2.4 Estimates of One-Time Government Revenues from the Development of a "Generic" General Merchandise Store, Figures in Thousands of Dollars

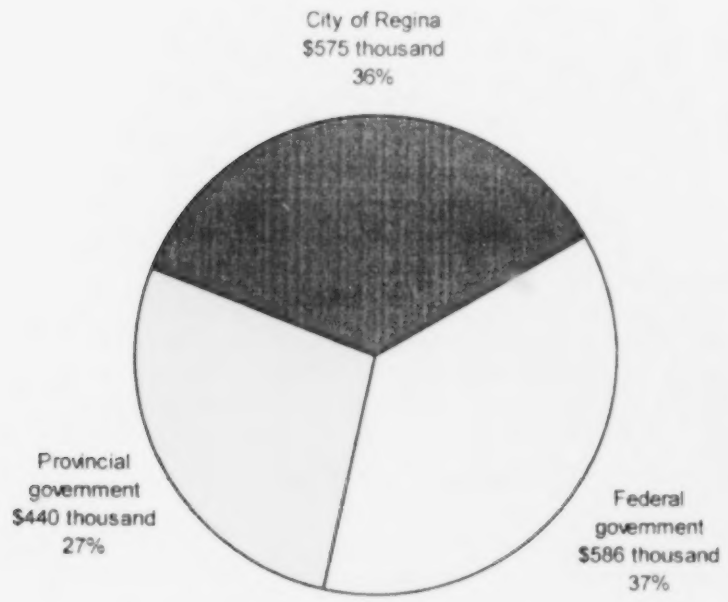
Item	Federal government	Provincial government	Local government			Total
			City of Regina	School Boards	Library	
Building permit			$31			$31
Development charges			$544			$544
GST (7% of capital cost of materials)	$263					$263
PST (assumes all materials are taxable at 6%)		$225				$225
Corporate income taxes (assumes 1% of capital cost with a 2/3:1/3 federal provincial split)	$42	$21				$63
Employee income taxes (assumes $33,450 average annual salary)	$281	$194				$475
Totals	$586	$440	$575	$0	$0	$1,601
Percentage of total	37%	27%	36%	0%	0%	100%

The calculation in Table 2.4 assumes ten months of full-time employment with a tax deduction code of $6,000 per year, the equivalent of one dependant. This translates into a tax rate of 19% – 11.2% for federal taxes and 7.8% for provincial taxes[6].

Based on these assumptions, the one-time revenues are estimated at $1.6 million split approximately in thirds to the three levels of government. The figures in Table 2.4 are shown graphically in Figure 2.2.

6 On an aggregate basis, income taxes paid by Saskatchewan residents in 2001 were 15% of gross personal income so the 19% assumption is somewhat above the provincial average.

Figure 2.1 **Estimates of One-Time Government Revenues from the Development of a "Generic" General Merchandise Store**



Total $1,601 thousand

SECTION 3 ONGOING IMPACTS

To estimate the ongoing impact of the generic store's operations on government revenues, there are several kinds of estimates required.

The corporation that owns or manages the store will pay ongoing property taxes to the City of Regina, the Regina School Boards, and the Public Library. As well, they will pay income taxes to the federal and provincial governments on profit from the store and possibly capital taxes to the provincial government.

The store will generate consumption taxes (GST and PST) for sales in the store. (The impact of tobacco and fuel taxes for stores that sell these products is not considered here.)

Thirdly, the employees who work in the store will pay income taxes to both the federal and provincial governments.

As with the one-time impacts described in Section 2, these are all gross figures that do not take account of offsetting costs to the three levels of government. They also exclude the positive spin off effects that could result from higher personal incomes or the negative spin off effects if other retailers close or record lower sales.

Table 3.1 shows the aggregate revenue statement for stores in Canada that are classified as "department and other general merchandise[7]" for the three year period ending in 2000, the most recent year available.

These data provide useful ratios in the analysis that follows, namely:

- the cost of goods sold account for 76% of gross sales;
- wages and salaries account for 18% of gross sales; and
- corporate income taxes account for 0.7% of gross sales.

To determine the impact of a single store, provincial averages for sales per square foot were

Table 3.1 Aggregate Revenue Statement for General Merchandise Stores, Canada, 1998-2000 avg

	$ millions	% of sales
Gross sales	$33,107	100%
Other revenues	$791	
Gross income	$33,898	
Cost of goods sold	$25,187	76%
Wages and salaries	$5,816	18%
Indirect taxes*	$265	1%
Depreciation	$558	2%
Other expenses	$1,121	3%
Total expenses	$32,858	
Net income before taxes	$693	
Income taxes	$237	0.7%
Net income after taxes	$456	

* GST and PST

[7] Source: CANSIM Table 180-0003, NAICS classification 452

obtained from a special Statistics Canada tabulation. These sales figures are based on the "average" chain store in the province that sells general merchandise so they are generally applicable to the kind of retail development we are examining. One might, however, expect that sales for Regina stores would be slightly higher than the provincial average because of the larger population base.

In 2000, the average sales per square foot was $323 per year, the equivalent of approximately $325 per square foot per year in 2001. So our generic store of 125,000 square feet would have annual sales of $40.6 million. Selected expenditures for this store are shown in Table 3.2 and details of how this would translate into revenues for the three levels of government are shown in Table 3.3. This information is shown graphically in Figure 3.1.

Table 3.2 Selected Revenue and Expenditure Items for "Typical" Store

	$ thousands
Gross sales	$40,625
Cost of goods sold (76% of gross sales)	$30,875
Net sales	$9,750
Salaries and benefits (18% of gross sales)	$7,313
Income taxes (0.7% of gross sales)	$284

Corporate Taxes

Income taxes paid by the corporation are estimated at $284 thousand per year. This is split between the federal and provincial governments on a 2/3:1/3 ratio[8]. In theory, the store would also pay provincial capital taxes but the amount is too small to have an effect on the figures[9].

Sales Taxes

Sales taxes are relatively easy to calculate because we are assuming that all of the merchandise is taxable. The GST would be 7% of net sales and the PST would be 6% of gross sales.

Income Taxes

The calculation of income taxes paid by the store's employees is more problematic. The average hourly rate for an employee in a large (100 or more employees) Saskatchewan retail establishment was $11.25 in 2002[10]. The tax rate on this income varies by the number of deductions available to the worker and how many hours are worked. Part-time employment is especially prevalent in retail trade establishments.

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8 This is the ratio of all corporate taxes paid by Saskatchewan corporations in 1999.

9 Capital taxes are calculated as a percentage (<1%) of capital assets but are based on the share of worldwide income generated by Saskatchewan stores. For multi-national chains, the figures would be in the hundreds rather than thousands of dollars because Saskatchewan income would be a very small part of total income.

10 Source: Statistics Canada Labour Force Survey microdata

Table 3.3 Estimates of Ongoing Government Revenues from a "Generic" General Merchandise Store, Figures in Thousands of Dollars

Item	Federal government	Provincial government	Local government			Total
			City of Regina	School Boards	Library	
Property taxes (estimate based on similar properties)			$248	$264	$27	$539
GST (7% of net sales)	$683					$683
PST (6% of gross sales)		$2,438				$2,438
Corporate income taxes (assumes 2/3:1/3 federal provincial split)	$189	$95				$284
Employee income taxes (assumes $11.25 per hour on a thirty hour week with no additional deductions)	$600	$402				$1,002
Totals	$1,472	$2,935	$248	$264	$27	$4,946
Percent of total	30%	59%	5%	5%	1%	100%

The maximum tax rate would occur if the employee worked full-time at that rate for the entire year and had no deductions beyond the normal ones. The combined federal/provincial tax rate in this case would be 17%. On the other hand, many retail sales clerks are part-time employees. With a dependant and working 20 hours per week, the tax rate on this kind of salary could be as low as 6%.

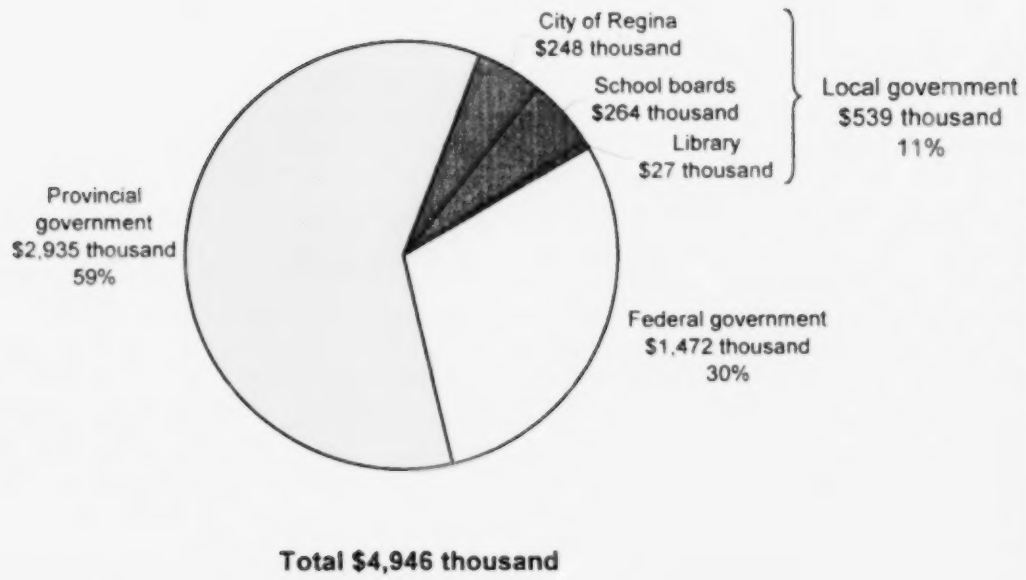
The calculation in Table 3.3 assumes thirty hours per week on a full-year basis with only the minimum deductions, typical of a second income earner in a family. Casual employees would pay substantially less than this and the full-time managers would pay substantially more. This translates into an average tax rate of 14% – 8.2% for federal taxes and 5.5% for provincial taxes[11].

Summary

An estimated total of $5 million flows to the three levels of government every year. Of this, the majority (59%) would go to the provincial government because of sales taxes. The federal government would receive 30% from the GST and from corporate and personal income taxes. The remaining 11% would flow to local governments – 5% to school boards, 5% to the City, and less than 1% to the public library.

[11] On an aggregate basis, income taxes paid by Saskatchewan residents in 2001 were 15% of gross personal income so the 14% assumption is slightly below the provincial average.

Figure 3.1 **Estimates of Ongoing Government Revenues from a "Generic" General Merchandise Store**



SECTION 4 SUMMARY AND OBSERVATIONS

The figures in Sections 2 and 3 can be summarized in two ways – by level of government, and by one-time vs. ongoing revenues.

Figure 4.1 combines the one-time and ongoing revenues to the three levels of government in a single chart. Figure 4.2 shows the detailed revenues in the schematic figure used earlier in the report to describe the various kinds of taxes.

In summary, the majority of gross revenues from the generic retail development described in this report flow to the federal and provincial governments, particularly because of the ongoing operation of the store and particularly to the provincial government. This is partly because of the nature of the store chosen (sales are all subject to PST) but primarily because consumption taxes primarily flow to the provincial government. The City of Regina receives $575,000 during the construction phase and $248,000 annually thereafter.

Figure 4.1 Estimated Gross Revenues to the Three Levels of Government, One-Time and Ongoing Effects

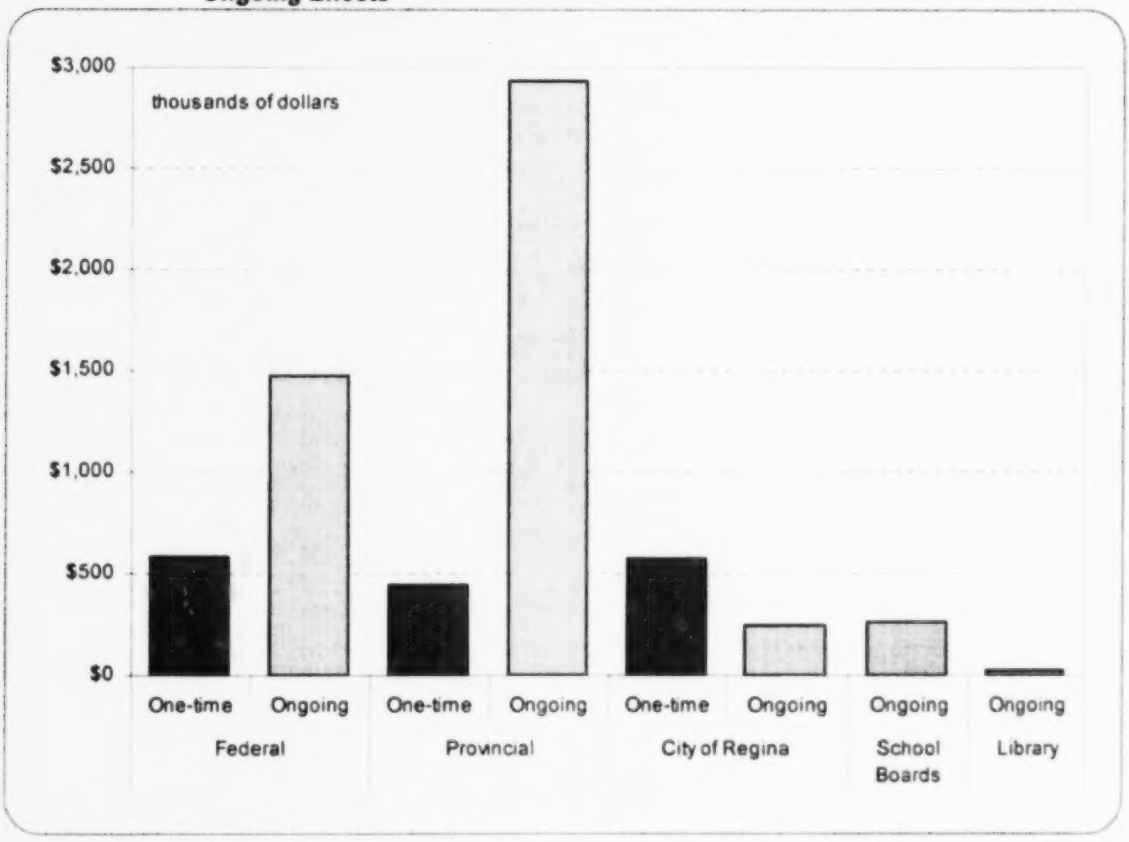
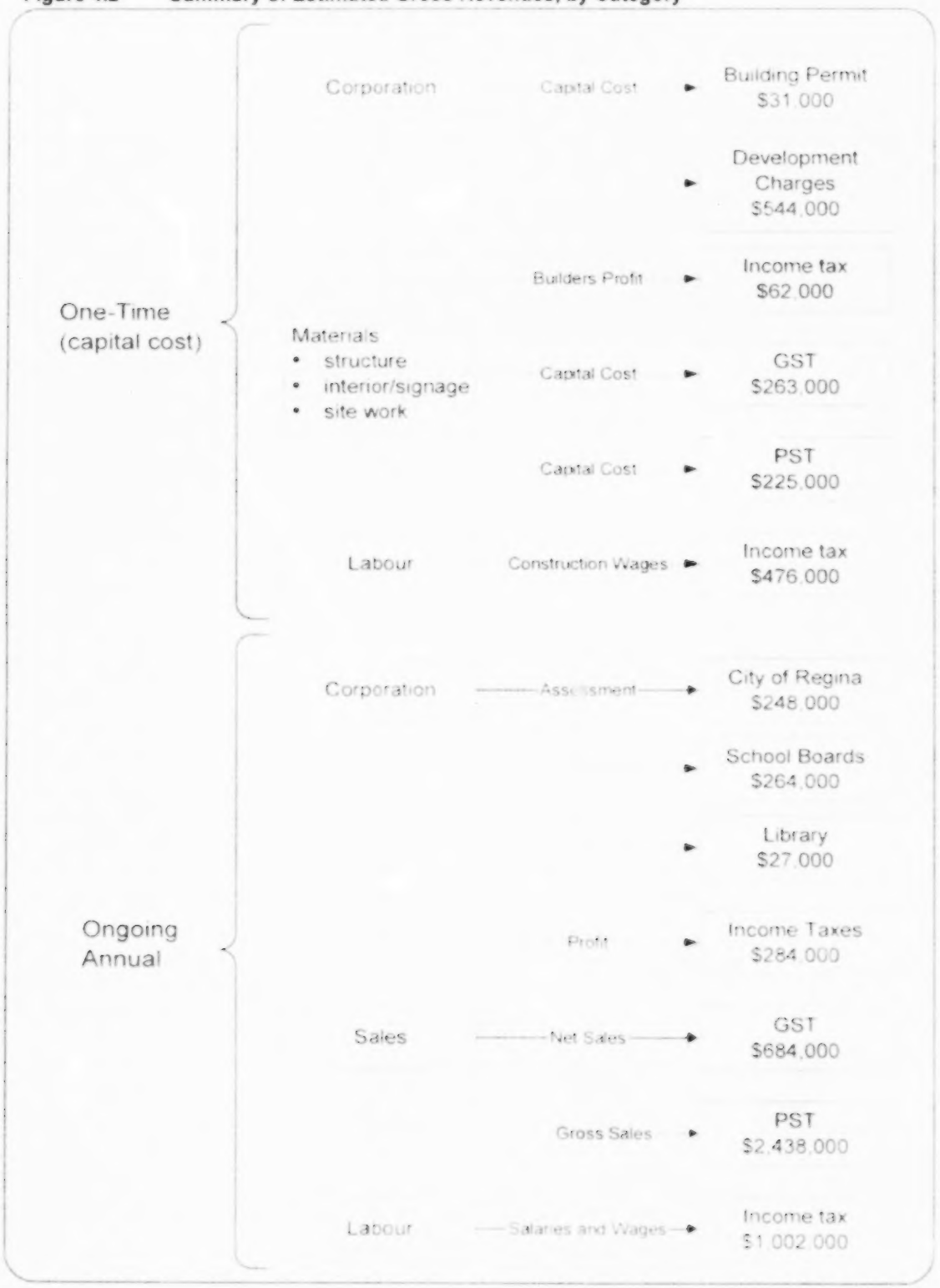


Figure 4.2 Summary of Estimated Gross Revenues, by Category



Other Factors

In the introduction, we noted that there are many other factors that can add to or offset the government revenues calculated in this report. Some of these factors are described below in qualitative rather than quantitative terms.

1. If the sales in the new store simply displace sales in other stores within the city or even the province, then there is no net change in consumption taxes paid to the federal and provincial governments. That is, the ongoing effect on GST and PST revenues is near zero. To the extent that prices are lower in the new store because of competition, sales tax revenues may actually decline.

2. Retail sales in Saskatchewan can increase as the result of new stores. Residents may choose to purchase goods in the newer stores rather than travel to other provinces or across the US border if they feel that the new stores are more competitive. This has a positive impact on PST revenues but no change in GST revenues unless the displaced sales are from the USA.

3. If the new store results in the closure of competing stores in the downtown core of the city, then the ongoing property tax revenues to the local government will be offset by any decline in tax revenues from the closure. Property taxes in the outlying areas are generally lower than in the downtown core so this may mean that ongoing revenues to the City of Regina, the School Boards, and the Library, will decline.

4. The GST and PST paid by the "generic" store would be much less if the store also sold food items or other non-taxable goods. Sales of tobacco and gasoline would result in an increase in gross government revenues. Sales that go to businesses rather than consumers would not result in any incremental GST receipts.

5. One-time revenues from building permits and development charges will be offset by increases in associated infrastructure costs such as new streets, bus routes, traffic controls, water, and sanitation services required. In the case of East Regina, there may also be an offsetting cost to the provincial government as some provincial highways are affected and may need to be relocated.

6. Newer stores tend to have higher sales per square metre than older stores. The net effect is that retail trade, as a sector, will generate less property tax over time.

7. To the extent that employment in the new store is offset by layoffs or closures in other stores, there may be no change in income taxes paid by retail employees. Corporate income and capital taxes may, for the same reason, net out to a lower or negative figure.

8. One of the goals of the retailers building stores on the periphery of the city is to attract customers from rural areas. To the extent that this happens, the City gains property taxes at the expense of local governments surrounding the city. Consumption taxes to the provincial and federal governments are not affected.

9. Secondary (spin off) effects may arise because of profits from the construction company or the retailer and increased income for construction workers or the store's employees. These typically generate additional economic activity which will have a positive effect on government revenues.